In the claims:

1. (Original) A process for the preparation of a compound of the formula I:

$$[L-R^1_m-R^4]_b$$

J

wherein

is an insoluble solid support selected from the group consisting of: poly(styrene-divinylbenzene), macroreticular poly(styrene-divinylbenzene), polystyrene which is radiation grafted to polypropylene, polystyrene which is radiation grafted to poly(tetrafluoroethylene), and polystyrene which is radiation grafted to poly(ethylene-tetrafluoroethylene) wherein the insoluble solid support is in a shape selected from a bead, a tube, a rod, a ring, a disk, or a well; L is -CH₂-, -C(CH₃)₂-, -CH(CH₃)-, -(CH₂)_nCH(CN)-, -(CH₂)_nCH(CO₂Me)-, -(CH₂)_nCH(Ph)-, -(CH₂)_nC(CH₃, Ph)-, -CH(CH₂CH₂Ph)-, or

n is zero or an integer from 1 to 5; m is zero or an integer from 1 to 100;

b is mMol content of initiator or solid-supported polymer per gram of insoluble solid support and is about 0.1 to about 5.0 mMol per gram; R^1 is selected from:

wherein

$$OCH_3$$
 $(CH_2)_nO$
 CHO
 $(CH_2)_nO$
 CHO
 $(CH_2)_nO$
 CHO
 $(CH_2)_nO$
 CH_2OH

wherein n is zero or an integer from 1 to 5;

Y is H, C1, Br, F, OH, or OMe;

Z is NCO, CO₂Me, CO₂Et, CO₂(i-Pr), CO₂(n-Bu), CO₂(t-Bu), CN, CO₂H, COC1, CO₂CH(CF₃) $_2$, CO₂ (pentafluorophenyl), CO₂(pentachlorophenyl), CO₂Ph, CO₂(N—succinimidyl), C(OMe) $_3$, C(OEt) $_2$, CON(OCH $_3$)CH $_3$, CHO, CH $_2$ OH, or C(CH $_3$) $_2$ OH; and

R⁴ is

which comprises the step of microwave irradiating a mixture comprising a compound of the formula II

$$[L-R^4]_b$$

and a compound III selected from:

2. (Original) The process according to Claim 1 wherein R^4 is

3. (Original) A process for the preparation of a compound of the formula IV:

$$[L-[(R^1)_w-R^2)_p]_m-R^4]_b$$

wherein

CH(CH₂CH₂Ph)-, or

is an insoluble solid support selected from the group consisting of:
poly(styrene-divinylbenzene), macroreticular poly(styrene-divinylbenzene), polystyrene which is
radiation grafted to polypropylene, polystyrene which is radiation grafted to polyethylene,
polystyrene which is radiation grafted to poly(tetrafluoroethylene), and polystyrene which is
radiation grafted to poly

(athylene tetrafluoroethylene) wherein the insoluble solid support is in a shape selected from a

(ethylene-tetrafluoroethylene) wherein the insoluble solid support is in a shape selected from a bead, a tube, a rod, a ring, a disk, or a well; L is -CH₂-, -C(CH₃)₂-, -CH(CH₃)-, -(CH₂)_nCH(CN)-, -(CH₂)_nCH(CO₂Me)-, -(CH₂)_nCH(Ph)-, -(CH₂)_nC(CH₃, Ph)-, -

n is zero or an integer from 1 to 5; m is zero or an integer from 1 to 100; w is an integer from 1 to 10; p is zero or an integer from 1 to 10;

b is mMol content of initiator or solid-supported polymer per gram of insoluble solid support and is about 0.1 to about 5.0 mMol per gram; R^1 and R^2 are each independently the same or different and are selected from

wherein

 $\begin{array}{l} X \text{ is H, F, } (CH_2)_n Cl, \\ (CH_2)_n Br, \\ (CH_2)_n I, \\ B(OH)_2, \\ (CH_2)_n CH=CH_2, \\ NCO, \\ CH(CH_3)NCO, \\ C(CH_3)_2 NCO, \\ CO_2 Me, \\ CO_2 Et, \\ CO_2 Et, \\ CO_2 (t-Bu), \\ CO_2 H, \\ COC_1, \\ CO_2 CH(CF_3) \\ 2, \\ CO_2 Ph, \\ CO_2 (pentafluorophenyl), \\ CO_2 (pentachlorophenyl), \\ CO_2 (pentachlorophenyl), \\ CO_2 (N-succinimidyl), \\ C(OMe)_3, \\ C(OEt)_3, \\ (CH_2)_n OH, \\ (CH_2)_n CH(OH)CH_2 OH, \\ (CH_2)_n SH, \\ CH_2 NHCH_2 CH_2 SH, \\ (CH_2)_n NHC (=S)NH_2, \\ (CH_2)_n NH_2, \\ (CH_2)_n N(Me)_2, \\ (CH_2)_n N(Et)_2, \\ (CH_2)_n (iPr)_2, \\ CH_2 NHCH_2 CH_2 NH_2, \\ CH_2 NH_2 CH_2 NH_2 CH_2 NH_2, \\ CH_2 NH_2 CH_2 NH$

$$OCH_3$$
 $(CH_2)_nO$
 CHO
 CHO
 $(CH_2)_nO$
 CHO
 $(CH_2)_nO$
 CH_2OH

wherein n is zero or an integer from 1 to 5;

Y is H, C1, Br, F, OH, or OMe;

Z is NCO, CO₂Me, CO₂Et, CO₂ (i-Pr), CO₂(n-Bu), CO₂(t-Bu), CN, CO₂H, COC1, CO₂CH(CF₃)₂, CO₂(pentafluorophenyl), CO₂(pentachlorophenyl), CO₂Ph, CO₂(N-succinimidyl), C(OMe)₃, C(OEt)₂, CON(OCH₃)CH₃, CHO, CH₂OH, or C(CH₃)₂OH; and R⁴ is

which comprises the step of microwave irradiating a mixture comprising a compound of the formula ${\bf II}$

a compound III selected from:

and a compound V selected from:

4. (Original) The process according to Claim 3 wherein R⁴ is

5. (Original) A process for the preparation of a compound of the formula VI:

$$[L-(R^1-R^2)_m-R^4]_b$$

wherein

is an insoluble solid support selected from the group consisting of: poly(styrene-divinylbenzene), macroreticular poly(styrene-divinylbenzene), polystyrene which is radiation grafted to polypropylene, polystyrene which is radiation grafted to poly(tetrafluoroethylene), and polystyrene which is radiation grafted to poly(ethylene-tetrafluoroethylene) wherein the insoluble solid support is in a shape selected from a bead, a tube, a rod, a ring, a disk, or a well; L is -CH₂-, -C(CH₃)₂-, -CH(CH₃)-, -(CH₂)_nCH(CN)-, -(CH₂)_nCH(CO₂Me)-, -(CH₂)_nCH(Ph)-, -(CH₂)_nC(CH₃, Ph)-, -CH(CH₂CH₂Ph)-, or

n is zero or an integer from 1 to 5; m is zero or an integer from 1 to 100; w is an integer from 1 to 10; p is zero or an integer from 1 to 10;

b is mMol content of initiator or solid-supported polymer per gram of insoluble solid support and is about 0.1 to about 5.0 mMol per gram; R^1 is selected from

R² is selected from

wherein

X is H, F, $(CH_2)_nCl$, $(CH_2)_nBr$, $(CH_2)_nI$, $B(OH)_2$, $(CH_2)_nCH=CH_2$, NCO, CH_2NCO , $CH(CH_3)NCO$, $C(CH_3)_2NCO$, CO_2Me , CO_2Et , $CO_2(t-Bu)$, CO_2H , COC_1 , $CO_2CH(CF_3)_2$, CO_2Ph , $CO_2(pentafluorophenyl)$, $CO_2(pentachlorophenyl)$, $CO_2(N-succinimidyl)$, $C(OMe)_3$, $C(OEt)_3$, $(CH_2)_nOH$, $(CH_2)_nCH(OH)CH_2OH$, $(CH_2)_nSH$, $CH_2NHCH_2CH_2SH$, $(CH_2)_nNHC(=S)NH_2$, $(CH_2)_nNH_2$, $(CH_2)_nN(Me)_2$, $(CH_2)_nN(Et)_2$, $(CH_2)_n$ $(iPr)_2$, $CH(CH_3)NH_2$, $C(CH_3)_2NH_2$, $CH_2NHCH_2CH_2NH_2$, $CH_2NHCH_2CH_2NHCH_2$

 $\label{eq:ch2N(CH2CH2NH2)2} \begin{array}{l} \text{CH}_2\text{N}(\text{CH}_2\text{CH}_2\text{N}(\text{CH}_2\text{CH}_2\text{N}(\text{CH}_2\text{CH}_2\text{N}(\text{CH}_2\text{CH}_2\text{OH})}\ _2, \ (\text{CH}_2)_n(\text{morpholin-4-y1}), \ (\text{CH}_2)_n(\text{piperidin-1-yl}), \ (\text{CH}_2)_n(\text{4-methypiperazin-1-yl}), \ \\ \text{N}(\text{S0}_2\text{CF3})\ _2, \ (\text{CH}_2)_n\text{CHO}, \ (\text{CH}_2)_n\text{Si}(\text{Me})\ _2\text{H}, \ (\text{CH}_2)_n\text{Si}(\text{Et})\ _2\text{H}, \ (\text{CH}_2)\text{Si}(\text{iPr})\ _2\text{H}, \ (\text{CH}_2)_n\text{Si}(\text{Bu})\ _2\text{H}, \ (\text{CH}_2)_n\text{Si}(\text{Ph})\ _2\text{H}, \ (\text{CH}_2)_n\text{Si}(\text{Me})\ _2\text{C1}, \ (\text{CH}_2)_n\text{Si}(\text{Et})\ _2\text{Cl}, \ (\text{CH}_2)_n\text{Si}(\text{Ebu})\ _2$

$$(CH_2)_nO$$
 CHO $(CH_2)_nO$ CHO $(CH_2)_nO$ CHO $(CH_2)_nO$ CH_2OH

wherein n is zero or an integer from 1 to 5;

Y is H, C1, Br, F, OH, or OMe;

Z is NCO, CO₂Me, CO₂Et, CO₂ (i-Pr), CO₂(n-Bu), CO₂(t-Bu), CN, CO₂H, COC1, CO₂CH(CF₃)₂, CO₂(pentafluorophenyl), CO₂(pentachlorophenyl), CO₂Ph, CO₂(N-succinimidyl), C(OMe)₃, C(OEt)₂, CON(OCH₃)CH₃, CHO, CH₂OH, or C(CH₃)₂OH; and R⁴ is

which comprises the step of microwave irradiating a mixture comprising a compound of the formula Π

a compound VII selected from:

and a compound VIII selected from:

wherein the ratio of the compound VII and the compound VIII is about 2:1.

6. (Original) The process according to Claim 5 wherein R⁴ is

7. (Currently amended) The compound according to Claim 13 which is

wherein is a polystyrene resin, m is from 1 to 100 and the bromine content is from about 4 to about 6 mmol/gram of resin.

8. (Currently amended) The compound according to Claim 13 which is

wherein is a polystyrene resin, m is from 1 to 100 and the chlorine content is from about 5 to about 7 mmol/gram of resin.

9. (Currently amended) The compound according to Claim 13 which is

$$O-N$$

wherein is a polystyrene resin, m is from 1 to 100 and the pyridyl content is from about 5 to about 7 mmol/gram of resin.

10. (Currently amended) The compound according to Claim 13 which is

wherein is a polystyrene resin, m is from 1 to 100, -NR aR is selected from diethylamino, diisopropylamino, piperidinyl, morpholino and piperazinyl and the amine content is from about 4 to about 7 mmol/gram of resin.

11. (Currently amended) The compound according to Claim 13 which is

wherein is a polystyrene resin, m is from 1 to 100, and the amine content is from about 3 to about 6 mmol/gram of resin.

12. (Currently amended) The compound according to Claim 13 which is

wherein is a polystyrene resin, m is from 1 to 100, and the isocyanate content is from about 1 to about 4 mmol/gram of resin.

13. (New) A compound which is:

wherein

is an insoluble solid support selected from the group consisting of: poly(styrene-divinylbenzene), macroreticular poly(styrene-divinylbenzene), polystyrene which is radiation grafted to polypropylene, polystyrene which is radiation grafted to poly(tetrafluoroethylene), and polystyrene which is radiation grafted to poly(ethylene-tetrafluoroethylene) wherein the insoluble solid support is in a shape selected from a bead, a tube, a rod, a ring, a disk, or a well; L is -CH₂-, -C(CH₃)₂-, -CH(CH₃)-, -(CH₂)_nCH(CN)-, -(CH₂)_nCH(CO₂Me)-, -(CH₂)_nCH(Ph)-, -(CH₂)_nC(CH₃, Ph)-, -CH(CH₂CH₂Ph)-, or

n is zero or an integer from 1 to 5; m is zero or an integer from 1 to 100; b is mMol content of initiator or solid-supported polymer per gram of insoluble solid support and is about 0.1 to about 5.0 mMol per gram; R^1 is selected from:

wherein

 $\begin{array}{l} X \text{ is H, F, } (CH_2)_n Cl, \\ (CH_2)_n Br, \\ (CH_2)_n I, \\ B(OH)_2, \\ (CH_2)_n CH=CH_2, \\ NCO, \\ CH_2 NCO, \\ CO_2 Me, \\ CO_2 Et, \\ CO_2 (t-Bu), \\ CO_2 H, \\ COC_1, \\ CO_2 CH(CF_3) \\ 2, \\ CO_2 Ph, \\ CO_2 (pentafluorophenyl), \\ CO_2 (pentachlorophenyl), \\ CO_2 (pentachlorophenyl), \\ CO_2 (N-succinimidyl), \\ C(OMe)_3, \\ C(OEt)_3, \\ (CH_2)_n OH, \\ (CH_2)_n CH(OH)CH_2 OH, \\ (CH_2)_n SH, \\ CH_2 NHCH_2 CH_2 SH, \\ (CH_2)_n NHC (=S)NH_2, \\ (CH_2)_n NH_2, \\ (CH_2)_n CH_2 NH_2, \\ (CH_2)_n CH_2 NH_2 + CH_2 NHCH_2 CH_2 NH_2, \\ (CH_2)_n (CH_2 CH_2 NH_2)_2, \\ (CH_2)_n (CH_2 CH_2 NH_2)_2, \\ (CH_2)_n (C$

$$(CH_2)_nO$$
 CHO $(CH_2)_nO$ CHO $(CH_2)_nO$ CHO $(CH_2)_nO$ CH_2OH

wherein n is zero or an integer from 1 to 5;

Y is H, C1, Br, F, OH, or OMe;

Z is NCO, CO₂Me, CO₂Et, CO₂(i-Pr), CO₂(n-Bu), CO₂(t-Bu), CN, CO₂H, COC1, CO₂CH(CF₃) ₂, CO₂(pentafluorophenyl), CO₂(pentachlorophenyl), CO₂Ph, CO₂(N—succinimidyl), C(OMe) ₃, C(OEt) ₂, CON(OCH₃)CH₃, CHO, CH₂OH, or C(CH₃) ₂OH; and

R⁴ is